

03050206-070

(*Four Hole Swamp*)

General Description

Watershed 03050206-070 is located in Dorchester and Berkeley Counties and consists primarily of *Four Hole Swamp* and its tributaries from Dean Swamp to its confluence with the Edisto River. The watershed occupies 78,723 acres of the Lower Coastal Plain region of South Carolina. The predominant soil types consist of an association of the Hobcaw-Mouzon-Albany-Daleville-Rains series. The erodibility of the soil (K) averages 0.20 and the slope of the terrain averages 1%, with a range of 0-2%. Land use/land cover in the watershed includes: 51.5% forested land, 28.6% forested wetland (swamp), 13.7% agricultural land, 1.0% urban land, 4.5% barren land, 0.4% nonforested wetland (marsh), and 0.3% water.

As a reach of Four Hole Swamp, this watershed accepts the drainage from all streams entering the swamp system upstream. This section of Four Hole Swamp accepts drainage from Merkel Branch (Lake Merkel), Santee Branch (Rock Branch), and Walnut Branch (Coldwater Branch, Little Walnut Branch, Cane Branch, Crawford Branch, Lang Branch, Deep Branch, Marshall Branch) near the Town of Dorchester. Halfway Gut Creek enters the swamp next, followed by Timothy Creek, which flows past the Town of Ridgeville. Powder Horn Branch drains into the swamp at the base of the watershed. There are a total of 151.9 stream miles and 177.2 acres of lake waters in this watershed. Four Hole Swamp is classified FW* (site specific classification requires DO not less than 4.0 mg/l and pH between 5.0-8.5), and the remaining streams are classified FW. The Francis Beidler Forest, a nature preserve, is another natural resource in the watershed.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
E-100	P/W	FW*	FOUR HOLE SWAMP AT US 78, E. OF DORCHESTER
E-015A	W/INT	FW*	FOUR HOLE SWAMP AT S-18-19

Four Hole Swamp - There are two SCDHEC monitoring sites along this section of Four Hole Swamp. At the upstream site (**E-100**), aquatic life uses are partially supported due to chromium excursions, compounded by significant increasing trends in turbidity and total suspended solids. There is a significant increasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving conditions for these parameters. The phthalate ester di-n-butylphthalate was detected in the 1998 sediment sample. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions. At the downstream site (**E-015A**), aquatic life and recreational uses are fully supported. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter.

NPDES Program

Active NPDES Facilities

RECEIVING STREAM

FACILITY NAME

PERMITTED FLOW @ PIPE (MGD)

NPDES#

TYPE

COMMENT

TIMOTHY CREEK
SHOWA DENKO CARBON INDUSTRIES
PIPE #: 001 FLOW: 0.086

SC0038555
MAJOR INDUSTRIAL

TIMOTHY CREEK
D&A PARTNERSHIP/RIDGEVILLE PIT
PIPE #: 001 FLOW: M/R

SCG730073
MINOR INDUSTRIAL

DEEP BRANCH
GIANT CEMENT CO./WASHIE RD SAND MINE
PIPE #: 001 FLOW: M/R

SCG730224
MINOR INDUSTRIAL

MARSHALL BRANCH
D&A PARTNERSHIP/CARTER PIT
PIPE #: 001 FLOW: M/R

SCG730021
MINOR INDUSTRIAL

FOUR HOLE SWAMP
SANDERS BROTHERS CONSTR./BIG OAK MINE
PIPE #: 001 FLOW: M/R

SCG730024
MINOR INDUSTRIAL

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME

FACILITY TYPE

PERMIT#

STATUS

SANDY PINES LANDFILL
MUNICIPAL

182401-1101
CLOSED

OAKRIDGE LANDFILL
DOMESTIC

182400-1101 (DWP-130)
ACTIVE

DORCHESTER COUNTY LANDFILL/DEE LEE SITE
MUNICIPAL

DWP-080
CLOSED

Mining Activities

MINING COMPANY

MINE NAME

PERMIT #

MINERAL

DORCHESTER DIRT CO., INC.
DIAMOND MINE #3

1027-35
SAND; SAND/CLAY

D&A PARTNERSHIP
CARTER MINE

1047-35
SAND; SAND/CLAY

D&A PARTNERSHIP
GIVENS MINE

1085-35
SAND; SAND/CLAY

SANDERS BROTHERS BIG OAK MINE	1031-35 SAND
LAFARGE MATERIALS, INC. HARLEYVILLE QUARRY	0110-35 LIMESTONE
GIANT CEMENT CO. WASHIE ROAD SAND MINE	1163-35 SAND
DORCHESTER MINING, INC. DORCHESTER MINE	0923-35 SAND; SAND/CLAY
MORGAN CORPORATION MORGAN MINE	1000-35 SAND; SAND/CLAY
D&A PARTNERSHIP RIDGEVILLE MINE	0870-35 CLAY

Growth Potential

Interstate 26 bisects this watershed and some growth may occur near the interchanges at the Towns of Harleyville and Ridgeville. A rail line and U.S. 178/78 parallels I-26; another rail line crosses U.S.78 at S.C. 453.